

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 April 2006 (20.04.2006)

PCT

(10) International Publication Number
WO 2006/041488 A1

(51) International Patent Classification:
C12N 5/06 (2006.01) *C12N 5/08* (2006.01)

(21) International Application Number:
PCT/US2004/033091

(22) International Filing Date: 7 October 2004 (07.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **MULTI-CELL TECHNOLOGIES, INC.** [US/US]; 701 George Washington Highway, Lincoln, RI 02865 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LIU, Jin** [US/US]; 16 Stanley Avenue, Barrington, RI 02806 (US). **FARIS, Ronald, A.** [US/US]; 167 Gallantin Street, Providence, RI 02907 (US).

(74) Agent: **CATALYSTLAW GROUP, APC**; 9710 Scranton Road, Suite 170, San Diego, CA 92121 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMMORTALIZED HEPATOCYTES

(57) Abstract: This invention relates to virally-immortalized hepatocyte cell lines, which are derived from a normal primary human liver cell, have the ability to proliferate in a serum-free media, are nontumorigenic, and produce proteins. These cell lines can be used for toxicity testing of potential therapeutic drugs and chemical entities. The cell lines may also be used for the production of therapeutic plasma proteins.

WO 2006/041488 A1